Department of Commerce • National Oceanic & Atmospheric Administration • National Weather Service

### NATIONAL WEATHER SERVICE CENTRAL REGION SUPPLEMENT 05-2005 APPLICABLE TO NWSI 10-1601 May 2, 2005

Operations and Services Performance, NWSPD 10-16 Verification Procedures, NWSI 10-1601

### CENTRAL REGION TAF VERIFICATION DISPLAY REQUIREMENTS

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(Signed by) April 22, 2005 Gary S. Foltz Date

Acting Director, Central Region

#### **Central Region TAF Verification Requirements**

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#### 1. <u>Introduction/Background</u>

The AvnVerify TAF verification software program, run at all Central Region (CR) Weather Forecast Office (WFO)s, has been evolving and improving. Likewise, the stability and display capability of the New Aviation Stats on Demand (SoD) (which is largely based on the AvnVerify Program) has improved significantly.

- 2. **Policy**. The maturation of the verification and display systems of both the AvnVerify and SoD Programs, along with the establishment of specific Government Performance and Results Act (GPRA) goals has provided the opportunity to develop regional requirements and standards for TAF verification and display of selected statistics.
- 3. <u>Purpose</u>. The requirement for a selected "core" suite of TAF verification statistics will provide for some standardization in Central Region. In addition to these required "core" verification statistics, WFOs are encouraged to establish local requirements that are pertinent to local users' needs and concerns. The New Aviation Stats on Demand should be used as a primary source for the information required for the bar graphs described.

#### 4. Description of Core Central Region TAF Verification Display

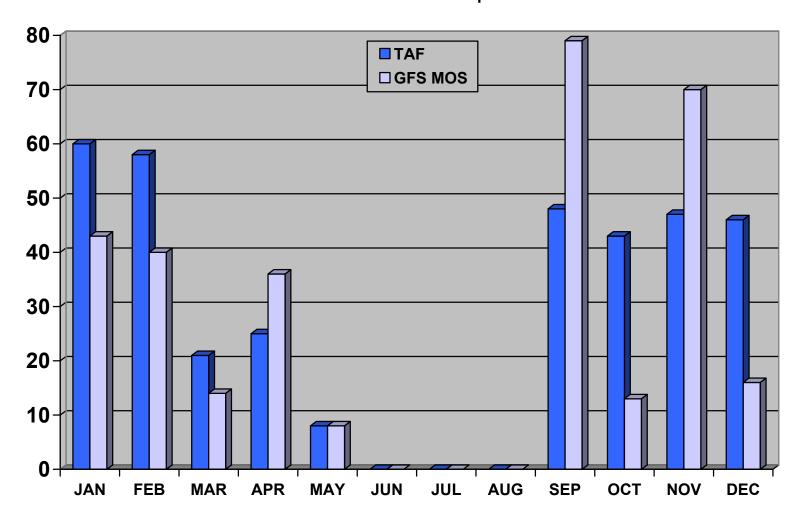
4.1. A bar graph displaying the monthly Probability of Detection (POD) of the following three, combined, flight categories (a) Instrument Flight Rules (IFR), (b) Low Instrument Flight Rules (LIFR) and (c) Very Low Instrument Flight Rules (VLIFR) - (essentially, everything below 1,000 feet and/or 3 miles) of scheduled TAF forecasts in the zero to 6-hour valid time period for each TAF site. This bar graph should be compared to the conterminous POD of the Model Output Statistics (MOS)-based forecasts, preferably the Global Forecast System (GFS) MOS. See Example 1.

- 4.2. A bar graph displaying the monthly False Alarm Ratio (FAR) of the combined IFR, LIFR, and VLIFR flight categories (essentially, everything below 1,000 feet and/or 3 miles) for all scheduled TAF forecasts in the zero to 6-hour valid time period for each TAF site. This bar graph should be compared to the conterminous FAR of the MOS-based forecasts. See Example 2.
- 4.3. A bar graph displaying the monthly Probability of Detection (POD) of the Marginal Visual Flight Rules (MVFR) category (between 1,000 feet and 3,000 feet and/or between 3 miles and 5 miles inclusive) of scheduled TAF forecasts in the zero to 6-hour valid time period for each TAF site. This bar graph should be compared to the conterminous POD of the Model Output Statistics (MOS)-based forecasts, preferably the Global Forecast System (GFS) MOS. See Example 3.
- 4.4. A bar graph displaying the monthly False Alarm Ratio (FAR) of the Marginal Visual Flight Rules (MVFR) category (between 1,000 feet and 3,000 feet and/or between 3 miles and 5 miles inclusive) for all scheduled TAF forecasts in the zero to 6-hour valid time period for each TAF site. This bar graph should be compared to the conterminous FAR of the MOS-based forecasts. See Example 4.

## POD (TAF vs. GFS MOS)

## **Combined IFR, LIFR and VLIFR Flight Cats**

TAF site: Aspen, Colorado (ASE) - 2004 statistics 0-6 hour forecast time period

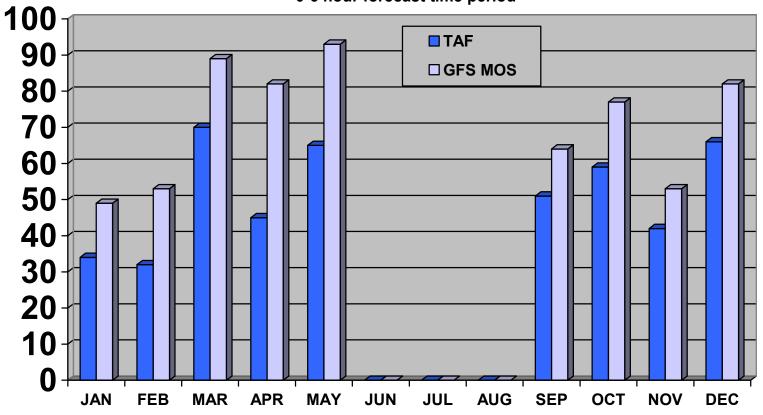


\*\* <MVFR includes IFR, LIFR and VLIFR conditions -- everything less than 1000 FT and 3 SM

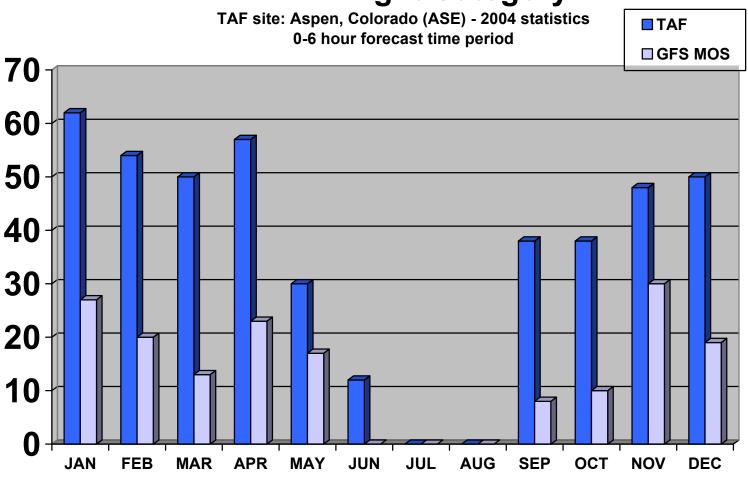
## FAR (TAF vs. GFS MOS)

## Combined IFR, LIFR and VLIFR Flight Cats

TAF site: Aspen, Colorado (ASE) - 2004 statistics 0-6 hour forecast time period



# POD (TAF vs. GFS MOS) MVFR Flight Category

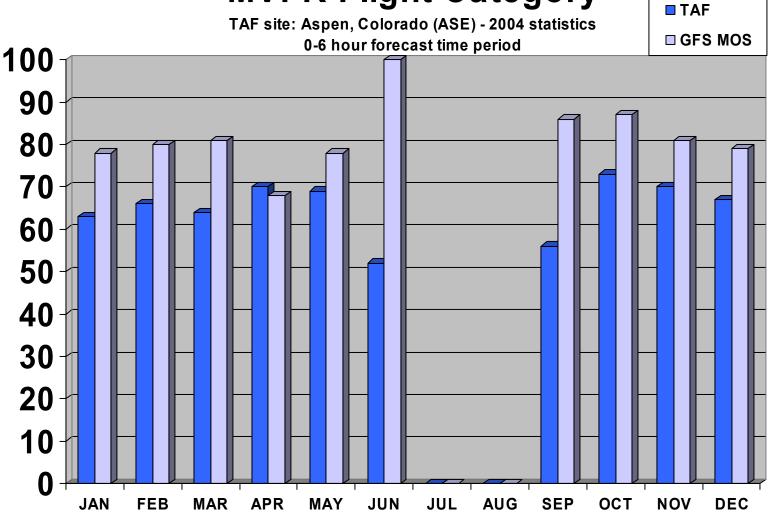


MVFR Conditions

Ceiling: ≥ 1000 to ≤ 3000 FT and Visibility: ≥ 3 to ≤ 5 SM

# FAR (TAF vs. GFS MOS)

## **MVFR Flight Category**



**MVFR Conditions** 

Ceiling: ≥ 1000 to ≤ 3000 FT and Visibility: ≥ 3 to ≤ 5 SM